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**Cc:** [Chip Humphrey](#)  
**Subject:** Round 2 Report Issues  
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Jim, Bob and Rick, as we stated during last week's management meeting, there are a number of outstanding issues relative to the Round 2 Comprehensive Site Summary and Data Gaps Report that EPA feels must be resolved in the near term. The issues are summarized below in order of priority. This list builds off the list we discussed at the August 31, 2006 management meeting.

As I described in my earlier email to Jim, the most critical pieces are: 1) Where we stand on the evaluation of multiple lines of evidence and how the various LOEs will be presented in the Round 2 Report; 2) the development of initial PRGs to support the initial evaluation of ecological risk to be presented in the Round 2 Report; and 3) whether screening and initial PRGs are fundamentally different.

EPA believes that a "check-in" is required to resolve apparent differences of opinion regarding the Lines of Evidence/Measurement Endpoint Table, the development of exposure point concentrations for the ecological risk assessment and the risk framework for the evaluation of transition zone water. I have identified these topics as high priority issues in the summaries presented below. In addition, EPA has identified a number of "medium priority" issues. These include TRV selection, BSAF and Dietary assumptions for the dietary pathway evaluation. For these issues, the check-in should include an update from the LWG on the selected approach to allow the EPA team to identify any "fatal flaws"

### **High Priority Issues - Approach must be agreed upon prior to Round 2 Report Submittal:**

Lines of Evidence/Measurement Endpoint Table: EPA and the Lower Willamette Group jointly developed a Lines of Evidence/Measurement Endpoint Table. This table was developed in response to the ecological framework document submitted by the LWG to EPA on March 15, 2006. The table described the lines of evidence to be used in the Ecological Risk Assessment. Lines of evidence were developed on a receptor by receptor basis. EPA understood that there was general agreement on the lines of evidence table. However the LWG's response to EPA comments on the PRG TM stated "are not in full agreement with the contents of the LOE table" but agreed to "move forward with an evaluation of each LOE within the risk assessment presented in the Round 2 Report" but not necessarily in the BERA.

**Needed Resolution:** Reach agreement on how multiple lines of evidence will be evaluated in Round 2 Comprehensive Site Summary and Data Gaps Report.

Weight of Evidence Framework: EPA has been working on developing a weight of evidence framework that can be applied to each line of evidence. However, to date, EPA has only received minor comments on what has been produced so far. It is unclear whether weight of evidence framework will be ready for the Round 2 Comprehensive Site Summary and Data Gaps analysis report.

**Needed Resolution:** Reach agreement on whether a weighting framework should be incorporated into the Round 2 Comprehensive Site Summary and Data Gaps Analysis

Report and if so, how.

Lines of Evidence for which initial PRGs will be developed: In EPA's comments on the PRG TM, EPA requested that initial PRGs be developed for each line of evidence for all receptors with the exception of the benthic community. EPA recognizes that the number of lines of evidence being considered for the benthic community prevents the development of initial PRGs for each line of evidence. However, for fish and wildlife, EPA feels that considering developing initial PRGs for multiple lines of evidence in the Round 2 Report is possible. EPA is willing to discuss the feasibility of developing initial PRGs for the fish lesion LOE but EPA does not believe it is unreasonable to develop initial PRGs for the remaining LOE (AWQC or other water criteria, tissue based TRVs and dietary based TRVs).

Needed Resolution: Reach agreement on LOEs for which initial PRGs will be developed in the Round 2 Comprehensive Site Summary and Data Gaps Analysis Report.

Use of Water Screening Levels: EPA is concerned about statements in the PRG response to comments that suggest that only AWQC will be considered for the development of initial PRGs. EPA and the LWG have developed a set of ecological screening level values for water. The LWGs April 29, 2005 Water Screening Level Approach Technical Memorandum states that the acute and water screening levels are "for use in preliminary ecological evaluation of Round 2 data relating to surface water, groundwater, and transition zone water (in the biologically active zone, 0-1 ft) from Portland Harbor." and that "The results of preliminary ecological screening of water will be presented initially in the ecological risk evaluation in the Round 2 Comprehensive Site Characterization and Data Gaps Evaluation Report and later in the Baseline Ecological Risk Assessment (BERA)." EPA recognizes that the water screening level values were derived from a range of sources. However that should not preclude us from using these values to develop initial PRGs in the Round 2 Report for the purpose of a screening level risk assessment and identification of Round 3 data gaps.

Needed Resolution: Reach Agreement on use of water SLs for initial PRG development.

Benthic Interpretation Report: In addition to the LWG's response to EPA comments on the PRG TM, the LWG recently provided a response to EPA comments on the Benthic Interpretation Report: The response to comments states that "The sediment toxicity testing lines of evidence will be weighted such that they will override other lines of evidence at the locations where they were collected." The response further states that "for areas where no sediment toxicity testing was performed, the Portland Harbor specific predictive toxicity models will be weighted such that they will override other lines of evidence where the two models agree or where one model gives a 'conclusive' prediction and the other model gives an 'inconclusive' prediction." Consistent with the LOE table, EPA believes that multiple lines of evidence must be considered including a comparison to sediment quality guidelines, an evaluation of transition zone water, comparison of actual or modeled benthic tissue concentrations to tissue based TRVs.

Needed Resolution: Reach agreement on how benthic toxicity results, (actual or predicted) will be evaluated in the context of other LOE for the benthic community.

Development of EPCs for the ERA: During previous discussions, LWG technical staff indicated that until the data evaluation process began, it was difficult to predict how exposure point concentrations would be developed. Through discussions on the food web model, we agreed to evaluate aquatic receptors on a three tier basis: Point by point basis for receptors with a small home range such as the benthic community, clams, crayfish and sculpin; Site-wide basis for receptors with a large home range such as northern pikeminnow and largescale sucker; Fate and transport segment for receptors with an in-between home range - i.e., smallmouth bass. At this time, it is unclear how EPCs will be developed for other receptors (i.e., birds and mammals).

Needed Resolution: For each wildlife receptor, reach agreement on how EPCs will be developed (e.g., point by point, site wide, or some intermediate home range based on F&T or RM segments).

Risk Framework for TZW:

In the LWG's response to EPA comments on the PRG TM, the LWG states that initial PRGs will not be developed for TZW (only surface water). Although EPA believes that initial PRGs for surface water would also be applicable to transition zone water, the scale of exposure between surface water and transition zone water is different. At this time, the risk framework for TZW has not been fully vetted.

Needed Resolution: Agree to risk framework for TZW for Round 2 Comprehensive Site Summary and Data Gaps Analysis Report.

**Medium Priority - Need to understand LWG approach - Identify any fatal flaws:**

TRV development: EPA has provided additional direction regarding the selection of TRVs. However, it is unclear whether this additional direction will be incorporated into the Round 2 Report or the BERA. The LWG should present its approach to EPA.

Dietary Assumptions: EPA and the LWG reached an agreement about how to address the dietary menu as part of the food web model. However, it is unclear how the LWG will develop dietary assumptions for the dietary approach for estimating risks to fish and wildlife. Maximum prey concentrations were utilized in the PRE. However, this approach is too conservative for the Round 2 Report and the BERA. The LWG should develop and present an RME approach for the dietary pathway. EPA recommends adopting a probabilistic approach or some other reasonably conservative way at estimating dietary exposure.

BSAF Development: The methodology for developing BSAFs for chemicals not being evaluated in FWM has not been fully presented to the EPA team. The LWG should present its plan for developing BSAFs. This should address receptors for which BSAFs will be developed and the statistical methodology to be employed.

Please review the list of issues described above. In addition, EPA is interested in understanding whether the LWG concurs with the draft issue summary table distributed to the LWG on August 24, 2006. EPA believes that rapid resolution of the high priority issues is required to ensure that the Round 2 Report remains on schedule and that the document is well received by EPA and its partners. We may want to schedule a conference call later this week or early next week to identify how to proceed.

Thanks, Eric